

220 West Main Street  
P.O. Box 32010  
Louisville, Kentucky 40232

**CERTIFIED MAIL**

**CERTIFIED NUMBER 7011 0110 001 9643 9463**

**RETURN RECEIPT REQUESTED**

Chief, Environmental Enforcement Section  
Environmental and Natural Resources Division  
U.S. Department of Justice  
Box 7611 Ben Franklin Station  
Washington, D.C. 20044-7611  
Re: DOJ No. 90-5-2-1-08850/1

**CERTIFIED MAIL**

**CERTIFIED NUMBER 7011 0110 0001 9643 9470**

**RETURN RECEIPT REQUESTED**

David Lloyd  
Air, Pesticides and Toxics Management Division  
Air and EPCRA Enforcement Branch  
U.S. Environmental Protection Agency, Region 4  
61 Forsyth Street  
Atlanta, GA 30303

October 17, 2013

**RE: Kentucky Utilities Company Consent Decree,  
Civil Action No. 3:12-cv-00076-GFVT  
"Coal-Fired Boiler Replacement for Kentucky Schools" -  
Project Plan Submittal for Review and Approval**

To Whom It May Concern:

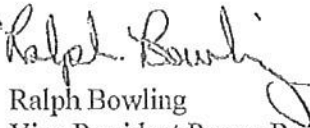
Pursuant to the above-referenced Consent Decree (CD) between the United States and Kentucky Utilities Company (KU), I am providing a project plan for the "Coal-Fired Boiler Replacement for Kentucky Schools" ("Boiler Project") environmental mitigation project for review and approval. This plan is required to be submitted to EPA pursuant to Appendix B, Section I.A. within 120 days from entry of the CD.

Section II of Appendix B requires that KU provide up to \$500,000 for use toward replacing a coal-fired boiler(s) with geothermal technology. The Elliott County School Board has agreed to replace one of its coal-fired boilers at Elliott County High School. Construction is expected to begin summer 2014 and be completed before the end of the year.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I understand that significant civil and/or criminal penalties may be imposed for submitting false, inaccurate, or incomplete information to the United States.

If you have any questions concerning this report, please feel free to contact Sarah Scheetz at (502) 627-2784 or Steve Noland at (502) 627-2940.

Sincerely,

A handwritten signature in cursive script, appearing to read "Ralph Bowling".

Ralph Bowling  
Vice President Power Production

cc: William Bumpers  
Baker Botts LLP  
The Warner  
1299 Pennsylvania Avenue, N.W.  
Washington, DC 20004

Bob Ehrler  
LG&E and KU Energy LLC

Marlene Pardee  
LG&E and KU Energy LLC

Jason Wilkerson  
LG&E and KU Energy LLC

LEAD Files

Funding of Coal-Fired Boiler Replacement for Kentucky  
Schools ("Boiler Project")

for

Kentucky Utilities Company

Civil Action No. 3:12-cv-00076-GFVT

October 17, 2013

## **I. Background**

Pursuant to the Consent Decree between the United States and Kentucky Utilities Company (KU), Civil Action No.3:12-cv-00076-GFVT, Kentucky Utilities Company (hereinafter "the Company") is required to spend no less than \$500,000 in project dollars in the replacement (including design, equipment purchase, installation and project start up) of one or more coal-fired boilers with a geothermal heat pump system ("geothermal") to be conducted in Kentucky schools. This will be referred to as the "boiler project" in the remainder of this plan. The consent decree also requires that a boiler project plan be submitted within one hundred and twenty days (120) days from entry of the Consent Decree (as stated in Appendix B, Section I.A.). The Consent Decree was entered by the judge in the U.S. District Court for the Eastern District of Kentucky on August 21, 2013, allowing for the boiler project.

In accordance with the Consent Decree, the geothermal system will be obligated to operate for at least three years after completion of installation (Appendix B, Section II.A.1.c). Installation of the geothermal will begin summer 2014 and be completed by December 31, 2014. The details of the project requirements can be found in the Consent Decree appendix. The entire Consent Decree appendix is included with this package.

The provisions of the Consent Decree relate to the Company's Ghent Station, located in Carroll County, Kentucky. The administration of the plan requirements will be coordinated by the corporate Environmental Affairs Department ("EA").

## **II. Project Plan and Progress**

### *Participant Selection:*

The Company contacted specific school districts within the Commonwealth of Kentucky to gauge interest level and capability. Initial inquiries were conducted and responses to a questionnaire and follow up discussions allowed for the selection of potential candidates.

EA ranked the potential candidates based on the size of the project, location of the project, past experience with geothermal, whether the applicant responded in a timely manner, willingness to sign a memorandum of agreement (MOA), and applicant's available resources. As a result of this process, the Elliott County Board of Education (ECBE) was selected as the funding recipient.

### *Schedule and Expenditures:*

A memorandum of agreement (MOA) was signed by the Company and ECBE in September 2013. An estimate of the project was received from ECBE's architect on September 5, 2013 denoting a preliminary estimate of \$1.5M for the upgrade to a geothermal system and an additional \$500,000 for other efficiency and/or necessary improvements. Because this far exceeds KU's \$500,000 funding commitment, ECBE will be the sole recipient of funding. By way of signing the MOA, ECBE has agreed it is not required by law to perform the project and it will not use the project, or any portion



thereof, to satisfy any obligations that it may have under other applicable requirements of law.

*Requirements:*

The plan provided below will include measures in which the Company and ECBE will undertake to meet the requirements of the Consent Decree. ECBE has been advised that by signing a legally binding MOA that it has committed to implement the project in accordance with the provisions of this plan.

To meet the requirements of Section V.12, of the Consent Decree, the Company will reimburse ECSB up to \$500,000 to replace one of the coal-fired boilers at Elliott County High School with a geothermal system. The reimbursement will be provided monthly upon their request, but not before receiving vendor invoices, work description, paid receipts and any other supporting documentation that is necessary to ascertain whether the project was completed in conformance with the MOA and Consent Decree. In addition, the following will be required:

- (1) Annually for the first three (3) calendar years of operation, ECBE shall provide a report to EA demonstrating compliance with the requirement to operate the geothermal for three (3) years.
- (2) ECBE will be required to maintain all documents related to the project, including all documents necessary to substantiate the accuracy and validity of requests for reimbursement until at least December 31, 2021.
- (3) ECBE will be required to provide monthly written updates to the Company concerning the progress of the project starting no later than January 31, 2014.
- (4) Within thirty (30) days following completion of the installation of the geothermal, ECBE will submit a written report fully describing the work performed as part of the boiler project and the activities for which funding from the Company was or will be utilized.
- (5) Kentucky Utilities will provide an estimate of the emission reductions in SO<sub>2</sub> and PM and any other general environmental benefits that result from the project to be included in the semi-annual update report to DOJ following project completion.

*Binding Agreements:*

To meet the requirements of Section V and Appendix B of the Consent Decree, the Company has required the participant to sign an MOA that binds the participant to comply with the requirements.

*Certification:*

Kentucky Utilities Company certifies that it is not otherwise required by law to perform the projects described in the plan, that Kentucky Utilities Company is unaware of any other person who is required by law to perform the projects, and that Kentucky Utilities

Company will not use any project, or portion thereof, to satisfy any obligation that it may have under other applicable requirements of law.

Gary H. Revlett 10-14-2013  
Gary H. Revlett

IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF KENTUCKY  
CENTRAL DIVISION

UNITED STATES OF AMERICA,

Plaintiff,

v.

KENTUCKY UTILITIES COMPANY,

Defendant.

Case No. 3:12-cv-00076-GFVT

CONSENT DECREE

Eastern District of Kentucky  
**FILED**

**AUG 21 2013**

AT FRANKFORT  
ROBERT R. CARR  
CLERK U.S. DISTRICT COURT



**UNITED STATES v. KENTUCKY UTILITIES COMPANY**

**APPENDIX B TO CONSENT DECREE**

In compliance with, and in addition to, the requirements in Section V of this Consent Decree ("Environmental Mitigation Projects"), Kentucky Utilities shall comply with the requirements of this Appendix to ensure that the benefits of the \$500,000 in Project Dollars are achieved.

**I. Overall Environmental Mitigation Projects Schedule and Budget**

A. Within one hundred twenty (120) days from entry of this Consent Decree, as further described below, KU shall submit plans to EPA for review and approval pursuant to Section XIII (Review and Approval of Submittals) of this Consent Decree for spending the \$500,000 in Project Dollars specified in this Appendix in accordance with the deadlines established in this Appendix. EPA shall determine, prior to approval, that all Environmental Mitigation Projects ("Projects") are consistent with federal law.

B. KU may, at its election, consolidate any plans required by this Appendix into a single plan.

C. Consistent with Paragraph 17 of the Consent Decree, beginning six months from entry of this Consent Decree, and continuing semi-annually thereafter until completion of each Project (including any applicable periods of demonstration or testing), KU shall provide EPA with written reports detailing the progress of each Project, including an accounting of Project Dollars spent to date.

D. Consistent with Paragraph 18 of the Consent Decree, within sixty (60) days following the completion of each Project required under this Consent Decree (including any applicable periods of demonstration or testing), KU shall submit to the United States a report that documents the date that the Project was completed, KU's results of implementing the Project, including the emission reductions or other environmental benefits achieved, and the Project Dollars expended by KU in implementing the Project.

E. Upon EPA's approval of the plans required by this Appendix, KU shall complete the Projects according to the approved plans. Nothing in the Consent Decree or this Appendix shall be interpreted to prohibit KU from completing the Projects before the deadlines specified in the schedule of an approved plan.

**II. Environmental Mitigation Projects**

A. Funding of Coal-Fired Boiler Replacement for Kentucky School(s) ("Boiler Project"): There are multiple public schools within Kentucky that use coal-fired boilers for heat generation. Replacement of those boilers with lower-emitting or zero emission heating and cooling technologies will reduce emissions of SO<sub>2</sub>, SAM, PM, and other air pollutants being emitted in the vicinity of children and young adults. By December 31, 2013, KU shall provide

funding of \$500,000 for use in the replacement (including design, equipment purchase, installation, and project start up) of one or more coal-fired boilers utilized by public schools located in Kentucky through installation of geothermal technologies.

1. Boiler Project Plan: Within ninety (90) days from the Date of Entry of the Consent Decree, KU shall submit to EPA for review and approval pursuant to Section VIII (Review and Approval of Submittals) of this Consent Decree a plan to implement the Boiler Project described above. The proposed plan for the Boiler Project shall:

a) Describe the process KU will utilize to identify public schools that may be eligible to participate in the Boiler Project and to solicit their interest in participating in the Project. In awarding funding, KU shall consider the following factors: (1) capability of the school to participate in, complete, and operate a replacement project; (2) proximity of the school to the Ghent Station; (3) emissions reductions that will result from the project; and (4) experience and demonstrated interest of applicant in implementing geothermal projects.

b) Ensure that schools participating in the Boiler Project do not otherwise have a legal obligation to reduce emissions through replacement of their coal-fired boilers.

c) Ensure that participating schools will bind themselves to operate the replacement heating and cooling systems for a period of at least three years.

d) Provide a schedule for completing each portion of the Boiler Project, including solicitation of interest, preparation of project budgets, and completion of projects.

e) Describe generally the expected environmental benefits of the Boiler Project, including any fuel efficiency improvements, and quantify emissions reductions expected.

f) Provide for periodic reporting on the progress of the Boiler Project consistent with Section I.C. and D., above.

2. Performance: Upon EPA's approval of the plan, KU shall complete the Boiler Project according to the approved plan and schedule.

B. Unspent Funds: If, as of December 31, 2014, there are any funds allocated for the Boiler Project that have not been expended, and are not expected to be expended, on the Boiler Project ("Unspent Funds"), KU shall provide notice to EPA and the U.S. Department of Justice pursuant to Section XVII (Notices) of the Consent Decree of the amount of such Unspent Funds.

1. KU may elect to pay any Unspent Funds up to \$100,000 to the United States Forest Service to be used for the restoration of land, watersheds, vegetation, and forests using adaptive management techniques designed to improve ecosystem health and mitigate harmful effects from air pollution. This may include reforestation or restoration of native species and acquisition of equivalent resources and support for collaborative initiatives with state and local agencies and other stakeholders to develop plans to assure resource protection over the long-term. Projects will focus on the Daniel Boone National Forest area in Kentucky or other appropriate forests in the region. If Unspent Funds are to be paid to the U.S. Forest Service, KU shall submit payment to the U.S. Forest Service in the appropriate amount within 30 days of the receipt of payment instructions from the U.S. Department of Justice.

2. If the amount of Unspent Funds exceeds \$100,000, KU shall include in its notice of Unspent Funds pursuant to Section II.B. above a proposed plan and schedule for one or more new environmental mitigation projects. The new project or projects, in combination with any Unspent Funds paid to the United States Forest Service under Section II.B.1. above, shall provide for the expenditure of all remaining Unspent Funds. Upon review and approval of KU's proposed plan by EPA pursuant to Section VIII (Review and Approval of Submittals) of the Consent Decree, Kentucky Utilities shall implement the new environmental mitigation project or projects in accordance with the schedule as approved by EPA.

3. Upon payment of any Unspent Funds to the United States Forest Service consistent with Section II.B.1. above, or use of any Unspent Funds for implementation of a new environmental mitigation project or projects pursuant to Section II.B.2. above, KU shall have no further responsibilities to use such Unspent Funds for implementation of the Boiler Project or any other mitigation project under Section V (Environmental Mitigation Projects) of this Consent Decree and this Appendix B.

4. Nothing herein shall obligate KU to spend in excess of \$500,000 total on environmental mitigation projects.



## AGREEMENT

This Agreement ("Agreement") is made and entered August 21, 2013 (the "Effective Date") by and between Kentucky Utilities Company ("KU") and the Elliott County Board of Education ("ECBE") (individually, each a "Party" and collectively, the "Parties").

### RECITALS

1. KU intends to provide funding to ECBE as part of KU's "Coal-Fired Boiler Replacement for Kentucky School(s) ("Boiler Project"), described in Section II.A. of the Appendix to the Consent Decree ("Consent Decree") lodged with the United States District Court for the Eastern District of Kentucky in the matter captioned *United States v. Kentucky Utilities Co.*, Case No. 3:12-cv-00076-GFVT (copy attached as Exhibit 1).
2. ECBE intends to utilize the funding provided by KU to pay for a portion of the costs of replacing one (1) coal-fired boiler at Elliott County High School with a geothermal heat pump system (hereinafter "the Project") in accordance with the terms of this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants and conditions contained herein, and for good and valuable consideration, the receipt, mutuality, and sufficiency of which is hereby acknowledged, the Parties hereby agree as follows:

### 1. OBLIGATIONS OF KU

- 1.1 KU shall reimburse up to \$500,000 of the cost of replacing the coal-fired boiler(s) at Elliott County High School with a geothermal heat pump system, including design, equipment purchase, installation, and project startup. KU shall make payments to the ECBE upon receipt of a request for reimbursement by ECBE accompanied by vendor invoices, work description, paid receipts, and any other supporting documentation requested by KU. ECBE may opt to request reimbursement monthly or a longer interval of their choosing. KU will process the request within 45 days of receiving all required documentation demonstrating appropriate expenditure. Nothing herein shall obligate KU to reimburse ECBE for costs beyond those specified in Section II.A. of the Appendix to the Consent

Decree. Under no circumstances shall KU be obligated to make any payments in excess of an aggregate of \$500,000, regardless of the total cost incurred by ECBE for the Project.

- 1.2 KU shall provide ECBE with a final copy of the pertinent provisions of the Consent Decree setting forth the terms and conditions of the "Boiler Project" following entry by the Court.

## **2. OBLIGATIONS OF ECBE**

- 2.1. ECBE agrees that the funding provided by KU under this Agreement shall be used strictly for reimbursement of costs related to replacing the coal-fired boiler(s) at Elliott County High School with a geothermal heat pump system and that such funding may not be used for any other purpose.
- 2.2. The scope of the Project shall be limited to the work associated with replacement of the coal-fired boiler(s) (one (1) boiler) at Elliott County High School and installation of geothermal heat pump system as described in the Memorandum from C. Thomas Potter II, Superintendent, regarding Elliott County High School Geothermal Heat Pump System, dated September 17, 2013 ("Memo") (attached as Exhibit 2). In the event ECBE desires to deviate from the work specified in the Memo dated September 17, 2013, ECBE shall first obtain written approval from KU for such deviation.
- 2.3. No later than September 17, 2013 ECBE agrees to provide KU with a written letter identifying ECBE's legal authority for accepting the funding from KU for the project and identifying ECBE's legal authority to conduct the Project.
- 2.4. ECBE shall commence installation of necessary equipment and other work associated with the Project no later than July 1, 2014. ECBE shall complete installation of all necessary equipment and other work associated with the Project and commence operation of the geothermal heat pump system at the Elliott County High School no later than December 31, 2014.
- 2.5. ECBE shall be obligated to operate the geothermal heat pump system at the Elliott County High School for a period of at least three calendar years after completion of installation.

- 2.6. ECBE shall maintain all documents related to the Project, including all documents necessary to substantiate the accuracy and validity of requests for reimbursement under this Agreement, until at least seven calendar years after the completion of the project. KU shall have the right to request any and all documents relating to the project or any other information necessary to substantiate the accuracy and validity of requests for reimbursement. ECBE shall be obligated to provide such documents or information to KU within fourteen (14) days of a request by KU.
- 2.7. ECBE shall provide monthly written updates to KU concerning the progress of the Project. The updates shall be submitted to KU within ten (10) days following the end of the month covered by the update.
- 2.8. Within thirty (30) days following completion of the installation of necessary equipment and all other work associated with the Project, ECBE shall submit to KU a written report fully describing the work performed as part of the Project and the activities and costs for which funding from KU will be utilized.
- 2.9. ECBE shall cooperate fully with KU in supplying all information on the Project required to be submitted to the U.S. Environmental Protection Agency under the terms of the Consent Decree including description of environmental benefits and efficiency improvements, quantification of emission reductions, and preparation of necessary reports.
- 2.10. Upon commencing operation of the geothermal heat pump system, ECBE shall submit annual reports to KU demonstrating compliance with the requirement to operate and maintain the geothermal heat pump system up to three calendar years after completion of project. These annual updates must be received by KU within 30 days following the end of the year covered by the update.
- 2.11. ECBE certifies that, as of the effective date of this Agreement, ECBE is not otherwise required by law to perform the Project and that ECBE will not use the Project, or any portion thereof, to satisfy any obligations that it may have under other applicable requirements of law.

### 3. MUTUAL OBLIGATIONS



- 3.1. In the event either Party to this Agreement fails to fulfill any of its obligations under this Agreement, the other party may terminate this Agreement without further obligation to the other party. The rights of the Parties to this Agreement to pursue remedies for breach of any provisions herein shall survive the termination, expiration or cancellation of this Agreement.
- 3.2. Except as otherwise provided in this Agreement, the Parties shall be responsible for any costs incurred in fulfilling their respective obligations under this Agreement.
- 3.3. Both Parties shall use good faith efforts to secure as much environmental benefit as possible in performing the Project, consistent with the applicable requirements and limits of this Agreement.

#### 4. CHOICE OF LAW AND FORUM

- 4.1 This Agreement shall be governed by the laws of the Commonwealth of Kentucky without regard to its choice of laws rules. Any action regarding the execution, interpretation, or performance of this Agreement shall be filed in Circuit Court for Jefferson County, Kentucky.

#### 5. MISCELLANEOUS

- 5.1 The terms and conditions of this Agreement shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns. This provision shall not be construed to permit assignment by any Party of any of its rights or duties under this Agreement, which assignment shall be prohibited except with the prior written consent of the other Party hereto.
- 5.2 This Agreement sets forth the entire understanding of the Parties with respect to the subject matter hereof, supersedes all prior or existing agreements concerning the subject matter hereof, and may be modified only upon written agreement executed by both Parties hereto.
- 5.3 All notices, requests, waivers and other communications provided in this Agreement shall be in writing, sent by overnight mail or certified mail, postage pre-paid, and addressed as follows:

If to KU:

Kentucky Utilities Company  
Attn: Sarah Scheetz  
Environmental Affairs Department  
220 West Main St.  
Louisville, KY 40202

If to ECBE:

Elliott County Board of Education  
Attn: C. Thomas Potter II, Superintendent  
P.O. Box 767 Sandy Hook, KY 41171  
100 South Kentucky 7, Sandy Hook, KY 41171

- 5.4 If any provision of this Agreement is declared to be invalid or unenforceable, the remainder of this Agreement shall not be affected thereby and shall be enforced to the fullest extent permitted by law.
- 5.5 This Agreement may be executed simultaneously in two or more counterparts, each of which shall be deemed an original and all of which together shall constitute but one and the same instrument.
- 5.6 Except to the extent otherwise expressly specified in this Agreement, all remedies specified herein are in addition to, and not in lieu of, other remedies available to the parties both at law and in equity including specific performance.

IN WITNESS WHEREOF, KU and ECBE have executed this Agreement as of the Effective Date.

AGREED TO BY:

Elliott County Board of Education

C. Thomas Potter II, Ed.D  
Name

Superintendent  
Title

9/17/2013  
Date

Kentucky Utilities Company

Ralph Bowling  
Name

VP Power Generation  
Title

9/25/13  
Date